Quality Control

Work Orde January-02-13		55		*940	)55*	a	·				Page 1
Revision ID:	D3215-3		A	ccept	*N900	<b>040</b>	100	)* s	etup Star Sto	IV.	S1* S2*
		Start Qty: 50.00 Req'd Qty: 50.00	*50* *50*		Cust Item I Customer:	D:			Q1.		
Approvals:	Process Plan	: MLJ	Date: 13-61-03	Tooling:	Da	ite:		R	un Sta Sto		R1*
	QC:		Date:	<b>SPC (Y/N):</b>	Da	ate:			510	*N	R2*
Sequence ID/ Work Center II		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revis	sion Nbr									
D3215	Rev I	)									
*100 *100* Waterjet FLOW CNC Waterj SOSA .09	et	FLOW WATER JET  Memo  1-Cut as pe  Rev:	or Dwg D3215 (D3215-3A) 22-Deburr if necessary	0.00  0.00  Dwg Rev:   7  3-Identify a	rog as D3215-3A			_50	6		Jm 1-7-17
*110 *110* QC		QC2- Inspect parts off n	nachine FAI/FAIB	0.00				50	0		Jm (-7
Quality Control		QC8- Inspect parts - sec	cond check	0.00 J <b>AS</b>	À						
*120 *120*		Memo		0.00 <b>\</b> 3_\-8	<u>3</u>			SO	7	<u>-</u>	

												DQA:	Date	·
NCR:	Yes	/ No					WORK ORDER NON-O	100	NFOR	MANCE / UP	DATE	•		
-						-						QA Closed:	Date	:
Nork Ord	er:						DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
							Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part I	۷o.						Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
							Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR I	Vo.						Work Order Update	ן נ		Large Fab	Composite	J	Supplier	_
Root					Desc	cri	otion of work order update	П	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty		C	or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
oc/Data														
quip/Tooling														
perator														
laterial														
etup														
ther														
rocess														
upplier														
raining														
napproved														
							F	AUL	T CATE	GORY				
Landi	ng (	Gear			_		General					_		
		Bending					Bend		Grain			Ovalized		Pressure/Forced
	L	Centre No	ot Concer	ntric to	o/s [		BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks					Broken/Damaged		Inspect	ion Incomplete		Part Incorred	ct	Weld
	Cracks Crushed/Crimped			[		Burrs	Γ	Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled	
•		Cuffs					Contamination		Mainte	enance		Part Moved		
		Heat Trea	t		Ī		Countersink		Mislabe	eled		Positioned V	Vrong	
		Inspection	n Strip in	Tube	Ī		Cut Too Short		Misread	i		Power Loss/	Surge	Other
		Ripples in	Bend		Ì		Drill Holes		Offset		_	_	<u>.                                    </u>	
		Torque W	aves in E	xtrusio	n þ		Drawing		Out of	Calibration				
		Turning Se	equence		İ		Finish		Out of	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

0.00

Memo

Form D3215-3A as per Dwg D3215

Brake NC

Brake NC

NCR:	Yes /	No

# WORK ORDER NON-CONFORMANCE / LIDDATE

													•
											DQA:	Date:	
NCR:	Yes	/ No				<b>WORK ORDER NON-</b>	O	NFORM	MANCE / UP	PDATE			
									•		QA Closed:	Date:	
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part I	٠ . No					Rework Scrap Use-as-is Work Order Update		f Therm	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root			:		Descr	ription of work order update	T	Initial	Ac	ction	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	nief Eng	Desc	cription	Date	Verification	QC Inspector
oc/Data quip/Tooling Operator Material etup Other Process Supplier Training Unapproved	a oling r					FAULT CATEGORY							
							AUL	T CATE	GORY				
Landi	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion				General  Bend  BOM/Route  Broken/Damaged  Burrs  Contamination  Countersink  Cut Too Short  Drill Holes  Drawing	Grain  Hardware  Inspection Incomplete  Instructions Incomplete/Unclear  Maintenance  Mislabeled  Misread  Ovalized  Over/Under tolerance  Part Incorrect  Part Lost/Missing  Windows  Part Moved  Positioned Wrong  Power Loss/Surge  Otherset  Out of Calibration				Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other			
Turning Sequence Finish							-	1	Sequence			-	

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		955		*949	55*							Page 3	
Item ID: Revision ID: Item Name:	D3215-3 Webbing Tidy			Accept	*N900	<b>040</b>	100	<b>)*</b> s	etup	Start Stop	*NS	S1* S2*	
Start Date: Required Date: Reference:	1/02/13	Start Qty: 50.00 Req'd Qty: 50.00	*50* *50*		Cust Item I Customer:	D:							
Approvals:		in:	Date:	Tooling: SPC (Y/N):		ate:		R	Run	Start Stop	*NF	₹1* ₹2*	
Sequence ID/ Work Center II 160 *160* QC Quality Control	D	Operation Description QC5- Inspect part comple Memo	eteness to step on W/O	Set Up/ Run Hours 0.00 15 0.00 13 1. C	Tool ID	Tool#	Plan Code	Accept Qty SO COUN	Rej Qty		Reject Number	Insp. Stamp	
*170 *170* Large Fab Large Fab				0.00 0.00 nd D3215-3B as per Dw 120854 Identify				50		EZ	me	<u>/3-/-</u> .	10

180

QC9- Inspect visual per QS1004- Fusion Welds

0.00

\*180\*

Memo

0.00

50 13-01-10



Quality Control

												DQA:	Date:	
NCR:	Yes	/ No					WORK ORDER NON-C	COI	VFORI	MANCE / UPDATE			:	
										<u>-</u>		QA Closed:	Date:	
Nork Ord	er:						DISPOSITION			AGAINS	ST DE	PARTMENT	PROCESS	
Part							Rework Scrap Use-as-is			Skid-tube Crosstub  Machining Small Fa  noforming Finishir	ab	4	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other
NCR	No.						Work Order Update		1110111	Large Fab Composit		1100,5101	Supplier	
Root					Des	crip	otion of work order update		nitial	Action	•	Sign &	•	
Cause		Date	Step	Qty		C	r Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
oc/Data quip/Tooling perator		·												
1aterial etup	_													
ther														
rocess														
upplier														ļ
raining Inapproved	$\vdash$													
							F	AUL	T CATE	GORY				•
Land	ing (	Gear					General		_			_		-
		Bending				_	Bend		Grain			Ovalized		Pressure/Forced
	<u></u>	Centre No	t Concer	ntric to (	o/s	_	BOM/Route		Hardwa			Over/Under	<b> </b>	Temperature/Cure
		Cracks			,		Broken/Damaged		1	on Incomplete		Part Incorred	<del></del>	Weld
		Crushed/0	Crimped,		1		Burrs	<u></u>	-{	ions Incomplete/Unclear		Part Lost/Mi	ssing	Wrong Stock Pulled
	<u>_</u>	Cuffs			1		Contamination		Mainte			Part Moved		
*	<u></u>	Heat Trea					Countersink	$\vdash$	Mislabe		_	Positioned V	_	¬
	<u></u>	Inspection	•	Tube	ļ		Cut Too Short	<u>_</u>	Misread	1		Power Loss/	Surge	Other
	<u> </u>	Ripples in					Drill Holes	<u></u>	Offset					
	<u></u>	Torque W		xtrusio	۱		Drawing	<u>_</u>	4	Calibration				<del></del>
		Turning Se	equence		1		Finish	L	Out of 9	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde				*949	55*						Page 4
Item ID: Revision ID: Item Name: Start Date:	D3215-3 Webbing Tidy 1/02/13	Start Qty: 50.00	*50*	Accept	*N900		100	)* s	etup Star Stop	1 7	S1* S2*
Required Date: Reference:	•	Req'd Qty: 50.00	*50*		Customer:		_				
Approvals:	Process Pla	an:	Date:	Tooling:	D	ate:		R	tun Star	1/1	R1*
•	QC:			<b>SPC (Y/N):</b>	<b>D</b>	ate:			Sto	*N	R2*
Sequence ID/ Work Center II 190 *1 QC* QC Quality Control	D	Operation Description QC5- Inspect part comple	eteness to step on W/O	Set Up/ Run Hours 0.00 15 9-3 0.00 \3_ \.	Tool ID	Tool #	Plan Code	Accept Qty SO COLA	Reject Qty	Reject Number	Insp. Stamp
*200*		Chemical Conversion Co	at per QS1005 4.1	0.00	~ ~ \qua			50	. Ale	) 9:13-1	ND
HandFinish Hand Finishing		Memo		0.00		7-					к 34

210

\*210\* Powdercoat Powder Coating

0.00

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

OVEN TEMPERATURE:

50 & BL 18-1-10

										DQA:	Date:	
NCR: Y	es /	No				WORK ORDER NON-C	ONFORM	MANCE / UP		QA Closed:	Date:	
Work Orde	nr.					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
WOIK OIGE	:I				<del> </del>	Rework		Skid-tube	Crosstube		Water Jet	Engineering
Part N	Part No.  NCR No.					Scrap Machining Small Fab Use-as-is Thermoforming Finishing					d. Eng. Coor.	Quality Other
NCR N	10			·		Work Order Update Large Fab Composite					Supplier	
Root					Descri	ption of work order update	Initial	Act	tion	Sign &		
Cause	[	Date	Step	Qty	C	or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material							- , &			<u> </u>		
Setup							,					
Setup Other												·
1												

Bend Pressure/Forced Bending Grain Ovalized BOM/Route Centre Not Concentric to O/S Over/Under tolerance Temperature/Cure Hardware Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Other Offset Ripples in Bend Drill Holes Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

**FAULT CATEGORY** 

General

Training Unapproved

**Landing Gear** 

Work Orde January-02-13		<b>9</b> 55		*949	55*							Page 5
Item ID: Revision ID: Item Name:	D3215-3 Webbing Tidy			Accept	*N900	<b>040</b>	100	)* ፡	Setup	Start Stop	*N:	S1* S2*
Start Date: Required Date: Reference:	1/02/13 1/18/13	Start Qty: 50.00 Req'd Qty: 50.00	*50* *50*		Cust Item I Customer:	D:			_	<b>S</b> 4 4		
Approvals: Process Pla QC: Sequence ID/		n:	Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II 220 *270* QC Quality Control  230 *230* Packaging Packaging	D	Operation Description QC3- Inspect Part Finish Memo Packaging Memo		Set Up/ Run Hours 0.00 AS 0.00 13 - 15 1	Tool ID	Tool#	Plan Code	Accept Qty SO Coun	Qt	y r	Reject Number	Insp. Stamp
240 *?40* QC Quality Control		QC21- Final Inspection - Memo	Work Order Release	0.00					,	13/	1)/1 21	4 X

NOD V. A. N.										DQA:Date:				
NCR: Y	Yes	/ No				WORK ORDER NON-C	CONFORM	MANCE / UP		QA Closed:	Date:			
Work Orde	er:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS			
Part N	_					Rework Scrap Use-as-is Work Order Update	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other				
Root						ption of work order update	Initial	l	ction	Sign &				
Cause		Date	Step	Qty	(	or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector		
Doc/Data														
Equip/Tooling														
Operator							:		:					
Material	П		[				1							

### **FAULT CATEGORY Landing Gear** General Bend Grain Ovalized Pressure/Forced Bending Centre Not Concentric to O/S BOM/Route Hardware Over/Under tolerance Temperature/Cure Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Wrong Stock Pulled Burrs Instructions Incomplete/Unclear Part Lost/Missing Cuffs Contamination Maintenance Part Moved Mislabeled Heat Treat Countersink Positioned Wrong Other Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio **Outside Dimensions**

Setup
Other
Process
Supplier
Training
Unapproved

Work Order ID:

94955

Parent Item:

D3215-3

Parent Item Name:

Webbing Tidy

**Start Date: 1/02/13** 

Required Date: 1/18/13

Page 1

Start Qty: 50.00

Required Qty: 50.00

Comments:

IPP A 04.01.06

New issue KJ/RF

IPP Rev:B Now on Waterjet 06-07-03

JLM

P	rev C	ecn 940	07.06.12	EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Date Issued Issued	Status
M5052H32S.040 5052-H32 .040 Sheet		Purchased	No			100	sf	103.6000	0.008	0.421055	J/S/13	10,108
				Location MAT022		<u>Loc Qty</u> 103.6	<u>L</u>	oc Code				
				119	384 406	46 57.6			0.	42/0	555	
<b>M5052H32S.040</b> 5052-H32 .040 Sheet		Purchased	No			130	sf	103.6000	0.0258	1.357895 1,4		Jm p-7-1
				Location		Loc Qty	L	oc Code				
				MAT022		103.6						
					384 406	46 57.6			-12	2406		

												DQA:	Dat	te:	
NCR: Y	es/	/ No				<b>WORK ORDER NON-</b>	100	NFOR!	MANCE / UP	DATE				_	
											QA CI	osed:	Dat	te:	
Work Order:				DISPOSITION				AGAINST DI	AGAINST DEPARTMENT/PROCESS						
	-			<del>-</del>		Rework	]		Skid-tube	Crosstube			Water Jet		Engineering
Part No.			Scrap			Machining	Small Fab	1		d. Eng. Coor.		Quality			
NCR No.			Use-as-is Work Order Update		Thern	noforming Large Fab	Finishing Composite	] Re	c/Stor	re/Packaging Supplier	-	Other			
Root						ption of work order update	1	nitial		tion	Sigi	n &			
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Desc	ription	Da	ate	Verification	n	QC Inspector
Doc/Data	$\Box$	•												ļ	
Equip/Tooling															
Operator	_		'											ļ	
Material	_					•									
Setup	$\square$														
Other												•			
Process	Н														
Supplier															
Training	$\square$														
Unapproved	i				<u> </u>		1	TCATE	CORY		1		<u> </u>		
							AUI	T CATE	GURY						
Landir	_	I				General		la .		Γ	٠				15. 1
	$\vdash$	Bending			_	Bend		Grain		<u> </u> -	Ovaliz			-	Pressure/Forced
Centre Not Concentric to O/S				BOM/Route		Hardware		- ∃ `		tolerance	<u> </u>	Temperature/Cure			
Cracks			Broken/Damaged Inspection Incomplete			Part	ncorre	ct	'	Weld					

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Outside Dimensions

Out of Sequence

Mislabeled

Misread

Offset

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Wrong Stock Pulled

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish

Folio

DART AEROSPACE LTD	Work Order:	94955
Description: Webbing Tidy	Part Number:	D3215-3A
Inspection Dwg: D3215 Rev: D		Page 1 of 1

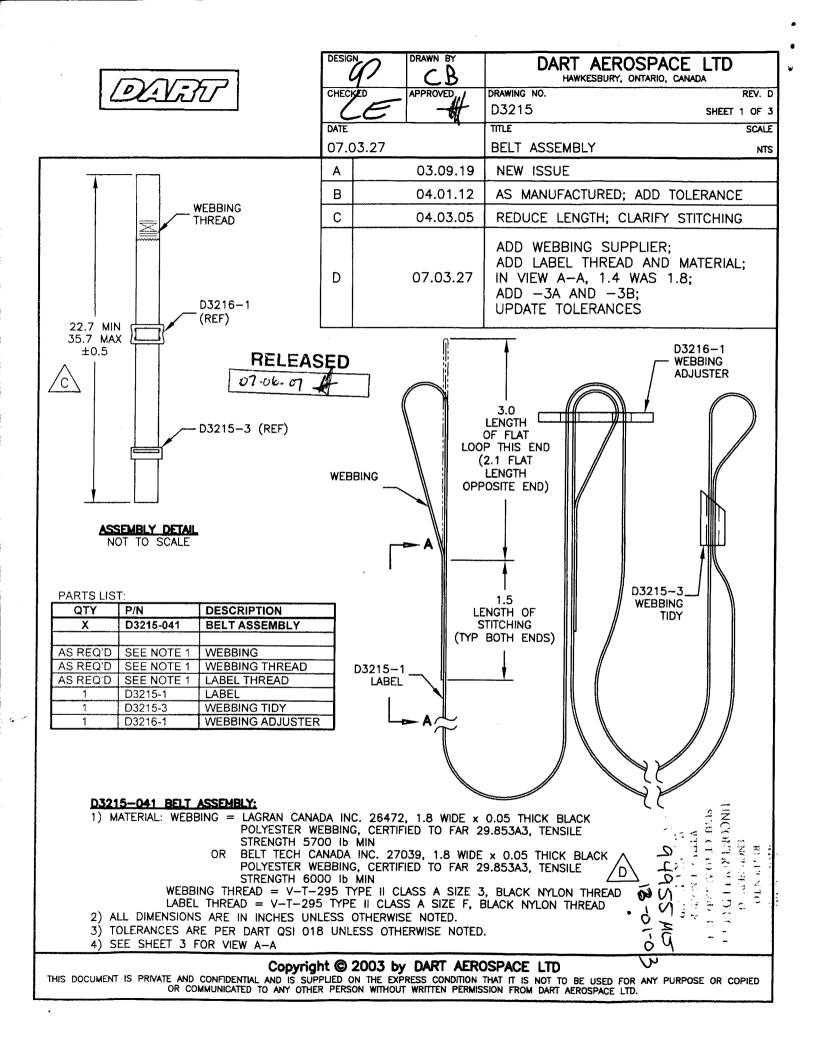
# FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

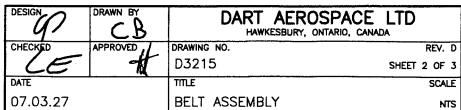
Durania						
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.92	+/-0.030	1,923"	<u> </u>		V	Itmoi
0.20	+/-0.030	Ò 199"	_		V	
0.78	+/-0.030	٥،٦٦٢"	_		V	
0.20	+/-0.030	0.20	_		V	
2.46	+/-0.030	2.461"	_		ν	
0.57	+/-0.030	0.57"	~		V	
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			- 12 10			
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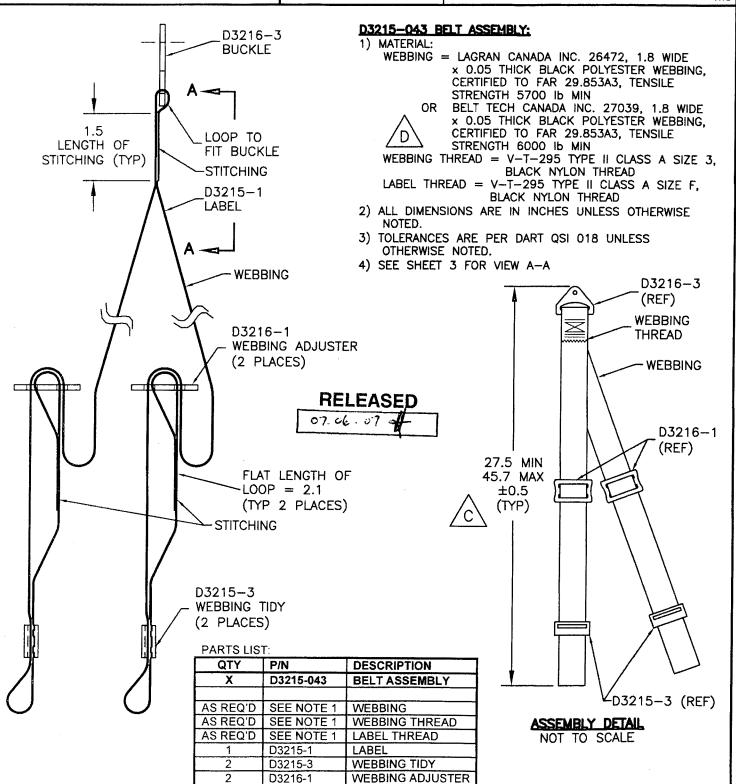
Measured by:	Audited by:	15	Prototype Approval:	N/A
Date: 1-7-13	Date:	13° 8	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.02.10	New Issue	KJ/RF	
В	06.03.15	Dwg Rev update	KJ/JLM	
С	07.10.24	Dimensions updated per Dwg Rev D	KJ/EC/DD, A	
D	08.09.10	0.53 dimension removed	KJ/DD 🛠	12





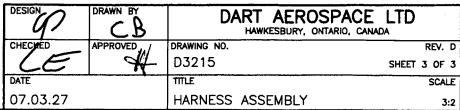


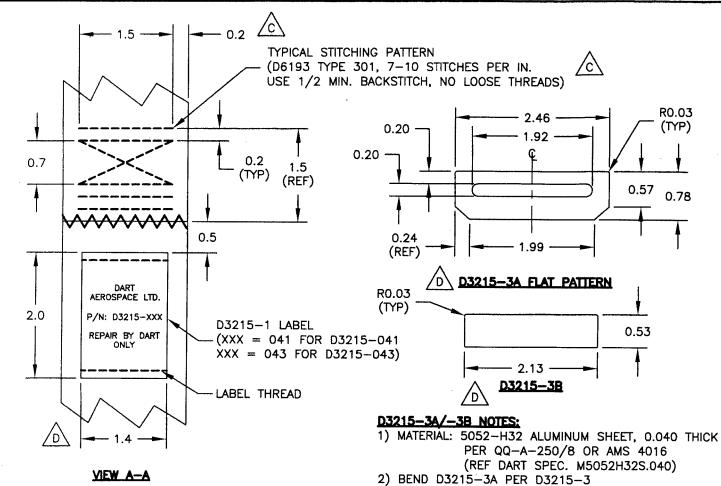


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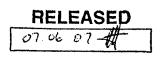
### D3215-1 LABEL:

1) MATERIAL: WHITE TYVEK OR

WHITE POLYESTER WHICH MEETS FMVSS 302 D

2) USE 1/8 BLACK LETTERING

3) CENTER ON BELT WIDTH



# 0.19 D3215-3A BEND R0.03 x 90° (2 PLACES) D3215-3B 2X 2X

### **GENERAL NOTES:**

- 1) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

## D3215-3 NOTES:

- 1) WELD PER DART QSI 004
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  POWDER COAT BLACK SANDTEX (4.3.5.7)
  PER DART QSI 005 4.3

D3215-3 WEBBING TIDY

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